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### (54) Residue removal by supercritical fluids

(57) A method for the removal of residue from an etched precision surface such as a semiconductor sample is provided which comprises exposing said precision surface to a supercritical fluid or liquid CO<sub>2</sub> under appropriate conditions that are sufficient to remove the

residue from the precision surface. Cryogenic aerosol may be used in conjunction with either the supercritical fluid or liquid CO<sub>2</sub>.

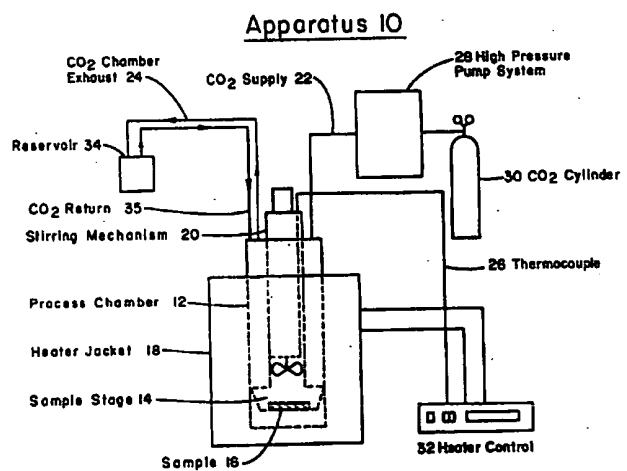


FIG.1

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# EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 7272

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.8)
X	EP 0 391 035 A (HUGHES AIRCRAFT COMPANY) 10 October 1990  * abstract * * column 1, line 7 - line 15 * * column 3, line 16 - line 26 * * column 5, line 52 - column 6, line 19 * * column 6, line 34 - line 36 * * column 9, line 47 - column 10, line 8 * * column 10, line 43 - column 11, line 8 * * column 11, line 46 - column 12, line 13; figures *	1-3, 7-10,15, 16,22,23	B08B7/00 H01L21/00
Y		4-6,11, 13,14, 19,20 12	
A			
Y	US 5 377 705 A (SMITH, JR. ET AL) 3 January 1995 * column 3, line 61 - column 4, line 8 * * column 4, line 19 - line 21 * * column 4, line 34 - line 48 * * column 5, line 33 - column 6, line 36; figures *	4-6,13, 14	TECHNICAL FIELDS SEARCHED (Int.Cl.8)  B08B
A		1-3,8, 13,14, 19,22	
Y	EP 0 587 168 A (LINDE AG) 16 March 1994 * abstract * * column 2, line 54 - column 3, line 36 * * column 5, line 1 - line 8 *	11,19,20	
A		1-7,12, 16	
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The present search report has been drawn up for all claims			
Place of search <b>THE HAGUE</b>		Date of completion of the search <b>27 July 1998</b>	Examiner <b>Van der Zee, W</b>
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons &amp; : member of the same patent family, corresponding document</p>			

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# EUROPEAN SEARCH REPORT

Application Number  
EP 97 30 7272

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
X	US 5 522 938 A (O'BRIEN) 4 June 1996  * column 1, line 12 - line 24 * * column 3, line 51 - line 60; figures *	1-4,8, 15,16,23	
A	-----	5,6	
A	US 5 267 455 A (DEWEES ET AL) 7 December 1993 * column 2, line 58 - line 68 * * column 3, line 19 - column 4, line 19 * * column 6, line 8 - line 24; figures * -----	1-6,8, 13-16,22	
			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
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